

### **REMARKS/ARGUMENTS**

Claims 1-28 are currently pending.

Claims 1, 5-7, and 9-12 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,068,630 (San Filippo) in view of U.S. Patent No. 5,917,806 (Lin et al.). Claim 16 stands rejected under 35 U.S.C. 103(a) as being unpatentable over San Filippo in view of Lin et al. and further in view of U.S. Patent No. 5,042,027 (Takase et al.). For the reasons set forth below, applicants request reconsideration of the rejections.

San Filippo is directed to a method for measuring load between MCDN devices for use in determining the path with optimal throughput. A local node measures its own load and communicates its load to its neighboring nodes, which communicate their loads to the local node. The portion of load attributed by each node to the total load on a link between nodes is subtracted from the load value to obtain a measurement. As noted by the Examiner, San Filippo does not derive a traffic flow model for a modified scenario using a plurality of constraints describing the interdependency of an initial to a modified scenario or calculate values and/or upper and lower bounds of traffic values for the modified scenario from the traffic flow model using the input data.

Lin et al. disclose a method for adaptively balancing communication traffic in a radio communication system to control congestion. Lin et al. use a congestion model initialized with preprogrammed values stored in memory. Likelihood functions are used to determine a probable cause of the congestion and select a course of action to end the congestion. Lin et al. do not derive a traffic flow model for a modified scenario using constraints describing the interdependency of an initial to a modified scenario. Instead, Lin et al. use a congestion model based on preprogrammed values. Furthermore, rather than calculating values and/or upper and lower bounds of traffic values for a modified scenario, Lin et al. identify congestion using a preprogrammed

model. There is no calculation of values or bounds of traffic values for a modified scenario.

Applicant's invention is particularly advantageous in that the system can be used to calculate traffic values in a communications network for a modified scenario using measured traffic data of the initial network. By deriving constraints from the interdependency of the initial and modified network, actual traffic data can be used in the calculation for the modified scenario if they are not affected by the modifications. In this way, either exact values or relatively tight bounds can be derived for the desired traffic values in a modified network. Furthermore, the system can be used to analyze a whole set of modifications. This is useful, for example, for a resilience analysis of a communications network where a service provider might want to ensure that the network has enough capacities to deal with the failure of one or more links.

Accordingly, 1, 5-7, and 9-12 are submitted as patentable over the references cited.

With regard to claim 16, Takase et al. disclose a method of controlling a communications system to ensure a satisfactory transmission and reception of communication messages. The traffic and link performance is continually or intermittently measured and the data obtained is stored. The traffic of different routes is then predicted by use of a predetermined algorithm on the basis of the measured and stored data. The routing is determined on the basis of the required performance and the predicted traffic. Takase et al. calculate predicted traffic using a predetermined algorithm based on the history of measured traffic information. Takase et al. do not overcome the deficiencies of the primary references.

Claims 2-3, 8, 15, 17, 19, 23, 24-26, and 28 stand rejected under 35 U.S.C. 103(a) as being unpatentable over San Filippo in view of Lin et al. and further in view of U.S. Patent No. 7,162,250 (Misra). Claim 27 stands rejected under 35 U.S.C. 103(a) as being unpatentable over San Filippo in view of Lin et al., Misra, and U.S. Patent No. 7,206,289 (Hamada). Claims 4, 18, 21-22 stand rejected under 35 U.S.C. 103(a) as

being unpatentable over San Filippo in view of Lin et al, Misra, and U.S. Patent No. 7,111,074 (Basturk). Claims 13-14 and 20 stand rejected under 35 U.S.C. 103(a) as being unpatentable over San Filippo in view of Lin et al., Misra and U.S. Patent No. 7,047,309 (Baumann et al.).

Misra was filed on May 16, 2003, which is after the International Application filing date of Applicants' invention, which is the PCT filing date of February 17, 2003. Accordingly, the rejection of claims 2-4, 8, 13-15, and 17-28 should be withdrawn.

The other references cited, including Hamada, Basturk and Baumann et al., do not overcome the deficiencies of the primary references.

For the foregoing reasons, Applicants believe that all of the pending claims are in condition for allowance and should be passed to issue. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at (408) 399-5608.

Respectfully submitted,



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